

AMENDMENTS TO THE CLAIMS:

The following is the status of the claims of the above-captioned application, as amended.

Claims 1-40 (Canceled).

Claim 41 (Currently amended). A method for enhancing secretion of a ~~protein~~ heterologous exoprotein of interest, the method comprising expressing said ~~heterologous exoprotein~~ protein in a recombinant *Bacillus* progeny cell derived from a *Bacillus* parent cell, wherein the cell comprises a nucleic acid construct encoding the heterologous exoprotein of interest and:

a) ~~the *Bacillus* progeny cell comprises at least one gene encoding metallo-regulated gene A (MrgA) protein with an amino acid sequence having at least 95% identity to the amino acid sequence shown in SEQ ID NO:2 and, optionally, further comprising a DNA segment a~~ heterologous promoter operably linked with the at least one gene encoding gene metallo regulated gene A (MrgA) protein with an amino acid sequence having at least 95% identity to the amino acid sequence shown in SEQ ID NO:2, wherein said gene and, optionally said DNA segment is manipulated with respect to the parent cell; or

b) ~~the *Bacillus* progeny cell comprises two or more copies of a~~ at least one heterologous gene encoding MrgA protein with an amino acid sequence which has at least 95% identity to the amino acid sequence shown in SEQ ID NO:2;
~~wherein the *Bacillus* progeny cell produces greater amounts of MrgA protein with an amino acid sequence having at least 95% identity to the amino acid sequence shown in SEQ ID NO:2 than the parent cell, and wherein the *Bacillus* progeny cell produces greater amounts of secreted or heterologous protein of interest than the *Bacillus* parent cell.~~

Claim 42-45 (Canceled).

Claim 46 (Currently amended). A method for producing a protein-heterologous exoprotein of interest, comprising the steps of:

a) cultivating a recombinant *Bacillus* progeny cell, wherein the cell comprises a nucleic acid construct encoding the heterologous exoprotein of interest and:

a) a heterologous promoter operably linked with at least one gene encoding metallo regulated gene A (MrgA) protein with an amino acid sequence having at least 95% identity to the amino acid sequence shown in SEQ ID NO:2; or

b) at least one heterologous gene encoding MrgA protein with an amino acid sequence which has at least 95% identity to the amino acid sequence shown in SEQ ID NO:2

~~derived from a *Bacillus* parent cell, wherein 1) the *Bacillus* progeny cell comprises at least one gene encoding metallo-regulated gene A (MrgA) protein with an amino acid sequence having at least 95% identity to the amino acid sequence shown in SEQ ID NO:2 and, optionally, further comprising a DNA segment operably linked with the encoding gene, wherein said gene and, optionally said DNA segment is manipulated with respect to the *Bacillus* parent cell; or~~

~~2) the *Bacillus* progeny cell comprises two or more copies of a gene encoding MrgA protein with an amino acid sequence having at least 95% identity to the amino acid sequence shown in SEQ ID NO:2, wherein the *Bacillus* progeny cell produces greater amounts of MrgA protein with an amino acid sequence having at least 95% identity to the amino acid sequence shown in SEQ ID NO:2 than the *Bacillus* parent cell, and wherein the *Bacillus* progeny cell produces greater amounts of a secreted or heterologous protein of interest than the *Bacillus* parent cell; and~~

b) recovering the protein.

Claim 47 (Canceled).

Claim 48 (Currently amended). A method in accordance with claim 41, wherein the *Bacillus* progeny cell is of a species chosen from the group consisting of *Bacillus alkalophilus*, *Bacillus amyloliquefaciens*, *Bacillus brevis*, *Bacillus circulans*, *Bacillus coagulans*, *Bacillus lautus*, *Bacillus lentus*, *Bacillus licheniformis*, *Bacillus stearothermophilus*, *Bacillus subtilis*, and *Bacillus thuringiensis*.

Claim 49 (Canceled).

Claim 50 (Currently amended). A method in accordance with claim 41, wherein said ~~protein~~ exoprotein is a protease, a lipase, a cutinase, an amylase, a galactosidase, a pullulanase, a cellulase, a glucose isomerase, a protein disulphide isomerase, a CGTase (cyclodextrin gluconotransferase), a phytase, a glucose oxidase, a glucosyl transferase, lactase, bilirubin oxidase, a xylanase, an antigenic microbial or protozoan protein, a bacterial protein toxin, a microbial surface protein, or a viral protein.

Claim 51 (Previously presented). A method in accordance with claim 41, wherein the MrgA protein comprises an amino acid sequence which is at least 97% identical to the amino acid sequence shown in SEQ ID NO: 2.

Claim 52 (Previously presented). A method in accordance with claim 41, wherein the MrgA protein comprises the amino acid sequence shown in SEQ ID NO: 2.

Claim 53 (Currently amended). A method in accordance with claim 41, wherein the *Bacillus* ~~progeny~~-cell comprises at least one exogenous copy of a polynucleotide encoding MrgA protein comprising an amino acid sequence which is at least 95% identical to the amino acid sequence shown in SEQ ID NO: 2.

Claim 54 (Currently amended). A method in accordance with claim 41, wherein the *Bacillus* ~~progeny~~-cell comprises at least one exogenous copy of a polynucleotide encoding MrgA protein comprising the amino acid sequence shown in SEQ ID NO: 2.

Claim 55 (currently amended). A method in accordance with claim 41, wherein the *Bacillus* ~~progeny~~ cell comprises at least one exogenous copy of a polynucleotide, which:

- a) comprises a polynucleotide sequence which is at least ~~90~~97% identical to the sequence shown in SEQ ID NO: 1; or
- b) hybridizes with the sequence shown in SEQ ID NO: 1, under ~~medium~~-high stringency conditions.

Claim 56 (Currently amended). A method in accordance with claim 41, wherein the *Bacillus* ~~progeny~~-cell comprises at least one exogenous copy of a gene encoding the MrgA protein transcribed from one or more heterologous and, optionally, artificial promoter.

Claim 57 (Currently amended). A method in accordance with claim 41, wherein the *Bacillus progeny*-cell comprises at least one exogenous copy of a gene encoding the MrgA protein integrated into the genome of the cell.

Claim 58 (Currently amended). A method in accordance with claim 41, wherein the *Bacillus progeny*-cell comprises at least one exogenous copy of a gene encoding the MrgA protein present on an extra-chromosomal construct.

Claim 59 (Canceled).

Claim 60 (Currently amended). A method in accordance with claim 46, wherein the *Bacillus progeny*-cell is of a species chosen from the group consisting of *Bacillus alkalophilus*, *Bacillus amyloliquefaciens*, *Bacillus brevis*, *Bacillus circulans*, *Bacillus coagulans*, *Bacillus lautus*, *Bacillus lentus*, *Bacillus licheniformis*, *Bacillus stearothermophilus*, *Bacillus subtilis*, and *Bacillus thuringiensis*.

Claim 61 (Canceled).

Claim 62 (Currently amended). A method in accordance with claim 46, wherein said protein exoprotein is a protease, a lipase, a cutinase, an amylase, a galactosidase, a pullulanase, a cellulase, a glucose isomerase, a protein disulphide isomerase, a CGTase (cyclodextrin gluconotransferase), a phytase, a glucose oxidase, a glucosyl transferase, lactase, bilirubin oxidase, a xylanase, an antigenic microbial or protozoan protein, a bacterial protein toxin, a microbial surface protein, or a viral protein.

Claim 63 (Previously presented). A method in accordance with claim 46, wherein the MrgA protein comprises an amino acid sequence which is at least 97% identical to the amino acid sequence shown in SEQ ID NO: 2.

Claim 64 (Previously presented). A method in accordance with claim 46, wherein the MrgA protein or comprises the amino acid sequence shown in SEQ ID NO: 2.

Claim 65 (Currently amended). A method in accordance with claim 46, wherein the *Bacillus progeny*-cell comprises at least one exogenous copy of a polynucleotide encoding MrgA protein

comprising an amino acid sequence which is at least 95% identical to the amino acid sequence shown in SEQ ID NO: 2.

Claim 66 (Currently amended) A method in accordance with claim 41, wherein the *Bacillus* progeny-cell comprises at least one gene encoding metallo regulated gene A protein with an amino acid sequence having at least 99% identity to the amino acid sequence shown in SEQ ID NO:2.

Claim 67 (Previously presented) A method in accordance with claim 46, wherein the MrgA protein comprises an amino acid sequence which is at least 99% identical to the amino acid sequence shown in SEQ ID NO: 2.

Claim 68 (Currently amended) A method in accordance with claim 41, wherein the *Bacillus* progeny-cell comprises at least one gene encoding metallo regulated gene A protein with an amino acid sequence consisting of the amino acid sequence shown in SEQ ID NO:2.

Claim 69 (Previously presented) A method in accordance with claim 46, wherein the MrgA protein consists of the amino acid sequence shown in SEQ ID NO: 2.

Claim 70 (Currently amended) A method for producing a heterologous exoproteinprotein of interest, comprising the steps of:

~~—cultivating a recombinant *Bacillus* cell, wherein the cell comprises a nucleic acid construct encoding the heterologous exoprotein of interest and:~~

~~a) a heterologous promoter operably linked with at least one gene encoding metallo-regulated gene A (MrgA) protein with an amino acid sequence having at least 95% identity to the amino acid sequence shown in SEQ ID NO:2; or~~

~~b) at least one heterologous gene encoding MrgA protein with an amino acid sequence which has at least 95% identity to the amino acid sequence shown in SEQ ID NO:2~~

~~a) —cultivating a *Bacillus* progeny cell derived from a *Bacillus* parent cell, wherein —~~

~~1) —the *Bacillus* progeny cell comprises at least one gene encoding metallo-regulated gene A (MrgA) protein with an amino acid sequence having at least 95% identity to the amino acid sequence shown in SEQ ID NO:2 and, optionally, further comprising a DNA segment operably linked with the encoding gene, wherein said gene and, optionally said DNA segment is manipulated with respect to the *Bacillus* parent cell; or~~

~~2) —the *Bacillus* progeny cell comprises two or more copies of a gene encoding MrgA protein with an amino acid sequence having at least 95% identity to the amino acid sequence shown in SEQ ID NO:2, wherein the *Bacillus* progeny cell produces greater amounts of MrgA protein with an amino acid sequence having at least 95% identity to the amino acid sequence shown in SEQ ID NO:2 than the *Bacillus* parent cell, and wherein the *Bacillus* progeny cell produces greater amounts of a secreted or heterologous protein of interest than the *Bacillus* parent cell; and~~

b) recovering the protein~~exoprotein~~, wherein said protein~~exoprotein~~ is a protease, a lipase, a cutinase, an amylase, a galactosidase, a pullulanase, a cellulase, a glucose isomerase, a protein disulphide isomerase, a CGTase (cyclodextrin gluconotransferase), a phytase, a glucose oxidase, a glucosyl transferase, lactase, bilirubin oxidase, a xylanase, an antigenic microbial or protozoan protein, a bacterial protein toxin, a microbial surface protein, or a viral protein.